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Chemigation, January 1970- August 1986

Compiled and edited by Charles N. Bebee
National Agricultural Library

United States Department of Agriculture
National Agricultural Library
Beltsville, MD 20705

and

United States Environmental Protection Agency
Office of Pesticide Programs
Washington, DC 20460

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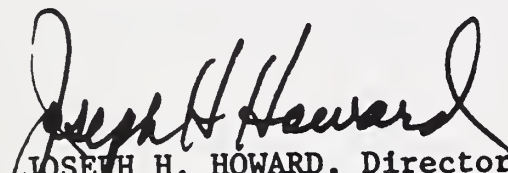
FOREWORD

This is the 14th volume in a series of commodity-oriented environmental bibliographies resulting from a memorandum of understanding between the United States Department of Agriculture, National Agricultural Library (USDA-NAL), and the Environmental Protection Agency, Office of Pesticide Programs (EPA-OPP).

This close working relationship between the two agencies will produce a series of bibliographies which will be useful to EPA in the regulation of pesticides, as well as to any researcher in the field of plant or commodity protection. The broad scope of information contained in this series will benefit USDA, EPA, and the agricultural community as a whole.

The sources referenced in these bibliographies include the majority of the latest available information from U. S. publications involving commodity protection throughout the growing and processing stages for each agricultural commodity.

We welcome the opportunity to join this cooperative effort between USDA and EPA in support of the national agricultural community.



JOSEPH H. HOWARD, Director
National Agricultural Library



STEVEN SCHATZOW, Director
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INTRODUCTION

The citations in this bibliography are selected from works by world authors on all aspects of chemigation. All citations are derived from AGRICOLA (Agricultural On-line Access), the family of data bases compiled by the National Agricultural Library and its cooperators.

This is the 14th bibliography included in a series of commodity-oriented environmental data bases jointly sponsored by the National Agricultural Library, United States Department of Agriculture, and the Office of Pesticides Programs, Environmental Protection Agency. Additional volumes issued recently or planned for the immediate future concern protection of corn, soybeans, pome fruits, stone fruits, grain sorghum, rice, and peanuts.

Entries in the bibliography are subdivided into a series of subject headings used in the table of contents of the Bibliography of Agriculture and in the National Agricultural Library Catalog. Each citation appears under the subject heading assigned to the particular item. A complete author index is also included in the publication.

The Office of Pesticide Programs, EPA, has furnished technical assistance to the compiler through members of a commodity-oriented environmental data team which included:

Charles D. Reese
H. Irving Brigham
Bernard Schneider, PhD.
Richard Petrie

Any comments or questions may be forwarded to the compiler:

Charles N. Bebee
USDA, National Agricultural Library
Room 111
Beltsville, MD 20705
(301) 344-3704



Chemigation
January 1970-August 1986

	<u>item #</u>
Economics	1-3
Land Economics	4
Economics of Agricultural Production	5-8
Farm Organization and Management	9-15
Rural Community Services	16
Plant Production-General	17
Plant Production-Horticultural Crops	18-44
Plant Production-Field Crops	45-67
Plant Production-Range	68
Plant Production-Miscellaneous Crops	69-72
Plant Breeding	73
Plant Nutrition	74-95
Plant Physiology and Biochemistry	96-112
Protection of Plants	113-120
Pests of Plants-General and Miscellaneous	121
Pests of Plants-Insects	122-138
Pests of Plants-Nematodes	139-147
Plant Diseases-Fungal	148-182
Plant Diseases-Bacterial	183-186
Plant Diseases-Viral	187
Plant Diseases-Physiological	188
Miscellaneous Plant Disorders	189-193
Protection of Plant Products-General and Miscellaneous	194
Weeds	195-252
Pesticides-General	253-295
H500	296
Soil Science	297-298
Soil Biology	299-300
Soil Chemistry and Physics	301-313
Soil Fertility-Fertilizers	314-472
Soil Resources and Management	473
Soil Cultivation	474-490
Soil Erosion and Reclamation	491
Forestry Related	492-493
Forest Management	494
Pests of Animals-Insects	495
Aquaculture Related	496
Structures and Structural Equipment	497-498
Farm Equipment	499-512
Conservation and Use of Energy	513
Biomass Energy Sources	514-515
Water Resources and Management	516-546
Drainage and Irrigation	547-732
Food Science, Field Crop	733
Food Processing	734
Food Composition, Horticultural Crop	735-736
Feed Composition	737
Pollution	738-757
Mathematics and Statistics	758-763
Author Index	p.103-108

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Fox, A.S. Clayton, K.C. Washington, D.C. The Service. Abstract: The United States has the physical potential for crop production in the eighties to satisfy domestic food needs, export needs, and the production of grain-based alcohol fuels. To meet the projected needs, crop acreage will likely have to expand. The exact amount of expansion needed will depend on the ultimate magnitude of the demands involved and on the productivity of the resources used. At least a part of the increased acreage will require investments in drainage, clearing, and irrigation. For farmers to bring adequate acreage into production, the prices they receive for their crops will probably have to increase substantially over the decade. Other farm inputs (water, fertilizer, pesticides) seem to be in sufficient supply for production to expand. Agricultural-food policy review AFPR - U. S. Dept. of Agriculture, Economics and Statistics Service. Apr 1981. Apr 1981. (4). p. 70-80. Charts. (NAL Call No.: aTX360.U6A2).

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LAND ECONOMICS

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Fox, A.S. Clayton, K.C. Washington, D.C. The Service. Abstract: The United States has the physical potential for crop production in the eighties to satisfy domestic food needs, export needs, and the production of grain-based alcohol fuels. To meet the projected needs, crop acreage will likely have to expand. The exact amount of expansion needed will depend on the ultimate magnitude of the demands involved and on the productivity of the resources used. At least a part of the increased acreage will require investments in drainage, clearing, and irrigation. For farmers to bring adequate acreage into production, the prices they receive for their crops will probably have to increase substantially over the decade. Other farm inputs (water, fertilizer, pesticides) seem to be in sufficient supply for production to expand. Agricultural-food policy review AFPR - U. S. Dept. of Agriculture, Economics and Statistics Service. Apr 1981. Apr 1981. (4). p. 70-80. Charts. (NAL Call No.: aTX360.U6A2).

ECONOMICS OF AGRIC. PRODUCTION

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Technological change, government policies, and exhaustible resources in agriculture.

Zilberman, D. Ames, Iowa : American Agricultural Economics Association. Extract: This paper analyzes the use of an exhaustible resource by an agricultural industry, taking into account agricultural policy considerations and some of the unique conventional wisdom features of the agricultural sector. The model is especially appropriate for analyzing the utilization of water resources. The model assumes the agricultural industry to be competitive, to have a wide distribution of farm sizes, to go through a process of adoption of a continuously improving technology, and to face inelastic demand. The new technology considered is a land quality-improving technology which is similar in its properties to modern irrigation technologies (drip, sprinkler, and center pivot irrigation). In particular, it considers a price-support policy and its impacts. American journal of agricultural economics. This paper was presented at the "Annual Meeting at the American Agricultural Economics Association," held Aug. 5/8, 1984, Ithaca, N.Y. Dec 1984. v. 66 (5). p. 634-642. Includes 7 references. (NAL Call No.: DNAL 280.8 J822).

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Thomson, S.J. Threadgill, E.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, Summer 1985. (fiche no. 85-2066). 11 p. (NAL Call No.: DNAL FICHE 290.9 AM32P).

0118

Root zone modification: fundamentals and alternatives (To till, fertilize, lime, irrigate, drain, and apply pesticides).

Taylor, H.M. Arkin, G.F. St. Joseph, Mich., American Society of Agricultural Engineers. Modifying the root environment to reduce crop stress. 1981. 1981. p. 3-17. ill. Includes 36 ref. (NAL Call No.: S596.7.M63).

0119

Tennessee growers are making the most of mulch.

Coffey, D.L. Willoughby, Ohio : Meister Publishing Company. American vegetable grower. Apr 1984. v. 32 (4). p. 12, 32. ill. (NAL Call No.: DNAL 80 C733).

0120

Effectiveness of agromeliorative measures and wheat protection from harmful objects in irrigated farming of the Transvolga area (Application of pesticides for weed, insect, and fungal disease control and cycocel for lodging control). Russian.

Kablov, V.V. BVZRA. Klepal'skaia, G.S.; Kuznetsov, A.N.; Myznikova, N.I.; Sagin, V.I. Leningrad : Institut. Biulletin' - Vsesoiuznyi nauchno-issledovatel'skii institut Zashchity rastenii. 1979. 1979. (46). p. 3-6. Includes references. (NAL Call No.: SB599.V8).

PESTS OF PLANTS – GENERAL AND MISC.

0121

**Effects of drip irrigation and soil fumigation
on yields and growth of.**

Horton, B.D. Edwards, J.H. Martinsburg, W. Va.
Proceedings ... annual convention National Peach
Council. 1978. 1978. (37). p. 25-27. ill. (NAL
Call No.: SB371.N3).

PESTS OF PLANTS – INSECTS

0122

Application of *Bacillus thuringiensis* through center-pivot irrigation systems for control of the southwestern corn borer and European corn borer (Lepidoptera: Pyralidae) (*Diatraea grandiosella*, *Ostrinia nubilalis*, Kansas).
Nolting, S.P. JEENA. Poston, F.L. College Park : Entomological Society of America. Journal of economic entomology. Dec 1982. v. 75 (6). p. 1069-1073. 9 ref. (NAL Call No.: 421 J822).

0123

Chemigation, or application of insecticide through overhead sprinkler irrigation systems, to manage insect pests infesting vegetable and agronomic crops (Georgia).
Chalfant, R.B. Young, J.R. College Park, Md., Entomological Society of America. Journal of economic entomology. Apr 1982. v. 75 (2). p. 237-241. ill. 6 ref. (NAL Call No.: 421 J822).

0124

Control of rice stem borer, *Tryporyza incertulas* Wlk. with application of insecticides in irrigation water.
Ramakrishnan, C; Velayutham, B; Narayanan, K; Sithanantham, S. Madras Agr J. Mar 1972. Vol. 59 (3): pp. 169-174. Ref. (NAL Call No.: 22 M262).

0125

Control of sugarcane *Pyrilla* (*perpusilla*) using systemic insecticides through irrigation water and soil application.
Patil, A.S. Hapase, D.G.; Moholkar, P.R. Kanpur, The Association. Proceedings of the ... annual convention of the Sugar Technologists' Association of India. 1980. 1980. (44th). p. 53-60. 9 ref. (NAL Call No.: 65.9 SU33P).

0126

An economic examination of an integrated pest management production system with a contrast between E-V and stochastic dominance analysis.
Musser, W.N. Tew, B.V. Epperson, J.E. Gainesville, Fla., Southern Agricultural Economics Assoc. Extract: A multiple-crop integrated pest management production system incorporating agronomic and horticultural crops is examined within an E-V and a stochastic dominance framework. The data were from a five-year experiment in Tifton, Georgia. Irrigation and chemigation for the system are provided by a center-pivot irrigation system. The study concludes that, within the range of pest thresholds examined, less intensive pest control would be preferred by risk-averse producers and have lower pesticide usage. Southern journal of agricultural economics. July 1981. v. 13 (1). p. 119-124. 25 ref. (NAL Call No.: HD101.S6).

0127

Efficacy of certain insecticides (quinalphos, phosphamidan, dichlorvos) applied through various spray systems in controlling the insect pests of rice.
Baskaran, P. Seetharaman, R. Bombay, Colour Publications. Pesticides. Dec 1979. v. 13 (12). p. 6-8. ill. 5 ref. (NAL Call No.: SB951.P43).

0128

Evaluation of southwestern corn borer control through center-pivot chemigation (Irrigation systems, pest control, Texas High Plains).
Michels, G.J. Chedester, L.D. College Station : The Station. PR - Texas Agricultural Experiment Station. July 1983. July 1983. (4134). 6 p. ill. Includes references. (NAL Call No.: 100 T31P).

0129

Impact of six insecticide-based arthropod pest management strategies on pecan yield, quality, and return bloom under four irrigation/soil-fertility regimes.
EVETEX. Dutcher, J.D. Worley, R.E.; Daniell, J.W.; Moss, R.B.; Harrison, K.F. College Park, Md. : Entomological Society of America. Environmental entomology. Dec 1984. v. 13 (6). p. 1644-1653. Includes references. (NAL Call No.: DNAL QL461.E532).

0130

Influences of rainfall and sprinkler irrigation on the residual activity of insecticides applied to corn for control of adult western corn rootworm (*Coleoptera:Chrysomelidae*) (*Diabrotica virgifera virgifera*).
Mayo, Z.B. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 190-193. Includes references. (NAL Call No.: 421 J822).

0131

Injection of insecticide in irrigation water to control corn earworm (*Heliothis zea*) and fall armyworm (*Spodoptera frugiperda*) on corn.
Hare, W.W. Young, J.R. St. Joseph, Mich., The Society. Transactions of the ASAE. American Society of Agricultural Engineers. Sept/Oct 1979. v. 22 (5). p. 1000-1003. ill. 3 ref. (NAL Call No.: 290.9 AM32T).

0133

0134

0135

0136

0137

0138

23

PESTS OF PLANTS – NEMATODES

0139

Application of pesticides via drip irrigation to control nematodes and foliar arthropods (Paratrichodorus, Belonolaimus).
Overman, A.J. Price, J.F. (S.I.) : The Society. Proceedings - Soil and Crop Science Society of Florida. 1983. v. 42. p. 92-96. Includes references. (NAL Call No.: 56.9 S032).

0140

Applying nematicides through an overhead sprinkler irrigation system for control of nematodes (Meloidogyne incognita, Macroposthonia ornata, in squash, southern peas, and corn).
Johnson, A.W. Young, J.R.; Mullinix, B.G. Ames, Iowa, Society of Nematologists. Journal of nematology. Apr 1981. v. 13 (2). p. 154-159. 4 ref. (NAL Call No.: QL391.N4J62).

0141

Control of Meloidogyne spp. on Russet Burbank potato by applying metham sodium through center pivot irrigation systems.
JONEB. Santo, G.S. Qualls, M. Raleigh, N.C. : Society of Nematologists. Journal of nematology. Apr 1984. v. 16 (2). p. 159-161. Includes 4 references. (NAL Call No.: DNAL QL391.N4J62).

0142

Effect of nematicides applied through a sprinkler irrigation system on control of root-knot nematodes on squash, southern pea, and field corn.
Johnson, A.W. AR-SO. Young, J.R. Ames, Iowa, Society of Nematologists. Journal of nematology. Oct 1980. v. 12 (4). p. 227. (NAL Call No.: QL391.N4J62).

0143

Effect of post-plant nematicides and trickle irrigation on newly planted peach trees (soil fumigation).
Funt, R.C. Krusberg, L.R.; Ross, D.S.; Goulart, B.L. Alexandria, The Society. Journal of the American Society for Horticultural Science. Sept 1982. v. 107 (5). p. 891-895. 9 ref. (NAL Call No.: 81 S012).

0144

The effects of drip irrigation and soil fumigation (to control Macroposthonia xenoplax) on 'Redglobe' peach yields and growth.
Horton, B.D. Wehunt, E.J.; Edwards, J.H.; Bruce, R.R.; Chesnee, J.L. Alexandria, Va., The Society. Journal of the American Society for Horticultural Science. July 1981. v. 106 (4).

p. 438-443. 18 ref. (NAL Call No.: 81 S012).

0145

Effects of nonfunigant nematicides applied through low-pressure drip irrigation on control of Meloidogyne incognita on tomatoes.
PLDRA. Garabedian, S. Van Gundy, S.D. St. Paul, Minn. : American Phytopathological Society. Plant disease. Feb 1985. v. 69 (2). p. 138-140. Includes 8 references. (NAL Call No.: DNAL 1.9 P69P).

0146

Nematocide residues in pineapple culture following point source application (through drip irrigation systems, Hawaii, Rotylenchulus reniformis).
Hyllin, V. Hyllin, J.W.; Apt, W. Oxford : Pergamon Press, c1983. Pesticide chemistry : human welfare and the environment : proceedings of the 5th International Congress of Pesticide Chemistry, Kyoto, Japan, 29 August-4 September 1982 / editors-in-chief, J. Miyamoto and P.C. Kearney. p. 213-216. ill. Includes references. (NAL Call No.: SB951.I562 1982 V.4).

0147

Soil fumigation via drip irrigation under full-bed mulch culture for row crops (Control of rootknot nematodes Meloidogyne incognita, Verticillium wilt, Verticillium albo-atrum).
Overman, A.J. (S.I.) : The Society. Proceedings - Soil and Crop Science Society of Florida. 1982. v. 41. p. 153-155. Includes references. (NAL Call No.: 56.9 S032).

PLANT DISEASES - FUNGAL

0148

Aerial application vs. fungigation for control of tomato disease, 1981 (Tomato (*Lycopersicon esculentum* 'C-37'), early blight; *Alternaria solani*, septoria leaf spot; *Septoria lycopersici*, bacterial leaf spot; *Xanthomonas vesicatoria*, anthracnose; *Colletotrichum phomoides*).

Potter, H.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 87. (NAL Call No.: 464.9 AM31R).

0149

Aerial application vs fungigation for control of tomato diseases, 1980 (Tomato (*Lycopersicon esculentum* 'C-37'), early blight; *Alternaria solani*, *Septoria* blight; *Septoria lycopersici*, bacterial leaf spot; *Xanthomonas vesicatoria*, bacterial canker; *Corynebacterium michiganense*, anthracnose; *Colletotrichum phomoides*, buckeye rot; *Phytophthora parasitica*).

Potter, H.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 80. (NAL Call No.: 464.9 AM31R).

0150

Application of fungicides through sprinklers effectively controls brown rot in citrus trees *Phytophthora* . HEB.

Oren, Y; Solel, Z; Ben-Gal, A. Hassadeh. Sept 1976. Vol. 56 (12): pp. 2173-2178. (NAL Call No.: 26 H27).

0151

Application of fungicides to peanuts through the irrigation system.

Backman, P.A. Crawford, M.A.; Rochester, E.W. Auburn, The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Summer 1981. v. 28 (2). p. 8. ill. (NAL Call No.: 100 AL1H).

0152

Application of metham through sprinkler irrigation for the control of soilborne (fungal) pathogens of peanuts.

Krikun, J. AR-BARC. Papavizas, G.C.; Frank, Z. (s.l.), The Society. Proceedings of American Peanut Research and Education Society. Sept 1980. v. 12 (1). p. 42. (NAL Call No.: SB320.A4).

0153

Applying fungicides to ornamentals through overhead irrigation.

Smith, D.A. Boulder : The Society. Combined proceedings - International Plant Propagators' Society. 1984 (pub. 1985). v. 34. p. 421-423. Includes 1 references. (NAL Call No.: DNAL 451 P692).

0154

Behavior and effectiveness of Vapam fumigant applied to soil in irrigation water Potatoes, watermelon, *Verticillium dahliae* .

Gerstl, Z; Mingelgrin, U; Kirkun, J; Yaron, B. Spec Publ Agric Res Organ Volcani Cent Div Sci Publ. 1977. Vol. 82: pp. 42-50. Ref. (NAL Call No.: S543.A35A35).

0155

A comparison of foliar disease prevention on selected woody ornamentals with chlorothalonil applied either fungigation or ground spray

Fungicides injected into the irrigation line and applied through overhead sprinklers .

Lambe, R.C. Smith, D. Pinnell, C. Nashville : The Association. Proceedings of SNA Research Conference - annual report - Southern Nurserymen's Association. 1984. (29th). p. 167-168. (NAL Call No.: DNAL SB403.S68).

0156

Control leaf diseases with your irrigation rig Peanuts, fungicides application .

Lee, T A Jr. Prog Farmer (Birmingham). May 1977. Vol. 92 (5): pp. N24-N25. (NAL Call No.: 6 T311).

0157

Control of belly rot and cottony leak of cucumber by fungigation, 1981 (Cucumber (*Cucumis sativus* 'Calypso'), belly rot; *Rhizoctonia solani*, cottony leak; *Pythium aphanidermatum*).

Jenkins, S.F. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 67-68. (NAL Call No.: 464.9 AM31R).

0158

Control of belly rot of cucumber by fungigation, 1979, 1980 (Cucumber (*Cucumis sativus* 'Calypso'), belly rot; *Rhizoctonia solani*).

Potter, H.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 61. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0159

Control of brown rot (caused by *Phytophthora* spp.) of citrus fruit (oranges, grapefruit) by application of fungicides via sprinkler irrigation systems.

Oren, Y. Solel, Z. Bet Dagan, Agricultural Research Organization. *Phytoparasitica*. 1978. v. 6 (2). p. 65-70. ill. 9 ref. (NAL Call No.: SB599.P53).

0160

Control of cercospora leaf spot and rhizoctonia crown rot diseases of sugarbeet with fungicides applied by sprinkler irrigation.

Potter, H.S. Schneider, C.L. Fort Collins, Colo., The Society. *Journal of the American Society of Sugar Beet Technologists*. Apr 1981. v. 21 (1). p. 50-55. 8 ref. (NAL Call No.: 66.9 AM35J).

0161

Control of early blight with fungicides injected through center-pivot irrigation, 1979 (Potato (*Solanum tuberosum* 'Monona'), early blight; *Alternaria solani*).

Thomson, S.V. (s.l.), The Society. *Fungicide and nematicide tests; results - American Phytopathological Society*. 1980. v. 35. p. 85. (NAL Call No.: 464.9 AM31R).

0162

Control of *Rhizoctonia* root rot of sugarbeet by fungigation with Terraclor, 1982 (*Rhizoctinia solani*, *Beta vulgaris*).

Whitney, E.D.FNETD. Skoyen, I.O. (s.l.) : The Society. *Fungicide and nematicide tests : results - American Phytopathological Society*. 1983. v. 38. p. 94. (NAL Call No.: 464.9 AM31R).

0163

Control of white mold of dry beans by fungicides applied via sprinkler irrigation (*Sclerotinia sclerotiorum*).

Forster, R.L. Samson, R.G. Geneva, N.Y. : Bean Improvement Cooperative. *Annual report of the Bean Improvement Cooperative*. 1984. v. 27. p. 106. (NAL Call No.: SB327.A1B5).

0164

Delayed applications of Topsin M fungicide via center-pivot sprinkler for white mold control in dry beans, 1982 (*Sclerotinia sclerotiorum*, *Phaseolus vulgaris*).

Forster, R.L.FNETD. (s.l.) : The Society. *Fungicide and nematicide tests : results - American Phytopathological Society*. 1983. v. 38. p. 90. (NAL Call No.: 464.9 AM31R).

0165

Effect of fungicides, applied through irrigation, on fungal populations in soil.

Melouk, H.A. AR-SO. Strugeon, R.V. Jr. Yoakum, Tex., The Association. *Proceedings - American Peanut Research and Education Association*. American Peanut Research and Education Association. 1979. v. 11 (1). p. 47. (NAL Call No.: SB320.A4).

0166

Fungigation for control of buckeye rot of tomato, 1983.

FNETD. Potter, H.S. Crawford, R.A. s.l. : The Society. *Fungicide and nematicide tests : results - American Phytopathological Society*. 1985. v. 40. p. 89. (NAL Call No.: DNAL 464.9 AM31R).

0167

Fungigation for control of early blight and anthracnose of tomato, 1984.

FNETD. Reese, L.E. Potter, H.S.; Crawford, R.A. s.l. : The Society. *Fungicide and nematicide tests : results - American Phytopathological Society*. 1985. v. 40. p. 89-90. (NAL Call No.: DNAL 464.9 AM31R).

0168

Fungigation for control of early blight of potato, 1984.

FNETD. Reese, L.E. Potter, H.S.; Crawford, R.A. s.l. : The Society. *Fungicide and nematicide tests : results - American Phytopathological Society*. 1985. v. 40. p. 80-81. (NAL Call No.: DNAL 464.9 AM31R).

0169

Fungigation for control of early blight, *Septoria* leaf spot, bacterial leaf spot and anthracnose of tomato, 1983.

FNETD. Potter, H.S. Crawford, R.A. s.l. : The Society. *Fungicide and nematicide tests : results - American Phytopathological Society*. 1985. v. 40. p. 88. (NAL Call No.: DNAL 464.9 AM31R).

0170

Fungigation method for control of *Cercospora* leaf spot of sugarbeet, 1977 (Beets (sugar) *Beta vulgaris* 'USH20'), *Cercospora* leaf spot; *Cercospora beticola*).

Potter, H.S. (s.l.), The Society. *Fungicide and nematicide tests; results - American Phytopathological Society*. 1980. v. 35. p. 60. (NAL Call No.: 464.9 AM31R).

0171

Fungigation Peanuts, disease control, white mold or southern blight disease caused by *Sclerotium rolfsii*.

Lee, T A Jr. Peanut Farmer. Apr 1977. Vol. 13 (4): pp. 34, 36. (NAL Call No.: SB351.A1P3).

0172

Lack of economic benefits by fungicides applied through center-pivot irrigation systems for control of *Alternaria solani* on potato.

PLDRA. Easton, G.D. Nagle, M.E. St. Paul, Minn. : American Phytopathological Society. Plant disease. Feb 1985. v. 69 (2). p. 152-153.

Includes 17 references. (NAL Call No.: DNAL 1.9 P69P).

0173

Metalaxyl and fenamiphos applied through irrigation water to control black shank/root-knot complex on tobacco.

PLDRA. Csinos, A.S. Johnson, A.W.; Golden, A.M. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1986. v. 70 (3). p. 210-213. Includes 24 references. (NAL Call No.: DNAL 1.9 P69P).

0174

Mobility and persistence of carbendazole (fungicides) applied to soil via drip irrigation (to control *Phoma tracheiphila*, in a lemon grove).

Solel, Z. Sandler, D. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1979. v. 69 (12). p. 1273-1277. ill. 22 ref. (NAL Call No.: 464.8 P56).

0175

Quality pumps the key to effective fungigation (Using irrigation rigs to apply fungicides).

Raleigh, Harvest. The Peanut farmer. May 1980. v. 16 (5). p. 28. (NAL Call No.: SB351.A1P3).

0176

Soil fumigation via drip irrigation under full-bed mulch culture for row crops (Control of rootknot nematodes *Meloidogyne incognita*, *Verticillium wilt*, *Verticillium albo-atrum*).

Overman, A.J. (S.I.) : The Society. Proceedings - Soil and Crop Science Society of Florida. 1982. v. 41. p. 153-155. Includes references. (NAL Call No.: 56.9 S032).

0177

Use of metham applied through sprinkler irrigation to control lettuce drop caused by *Sclerotinia minor* (Abstract only).

Adams, P.B. Krikun, J.; Johnson, S.A.; Carpenter, H.E. St. Paul, Minn., American Phytopathological Society. Phytopathology. July 1981. v. 71 (7). p. 764. (NAL Call No.: 464.8 P56).

0178

What you can do with fungigation. It's effective and potentially more economical (Peanuts).

Sturgeon, R.V. Jr. Raleigh, N.C., Harvest Publishing Company. The Peanut farmer. May 1979. v. 15 (5). p. 10, 12, 24. (NAL Call No.: SB351.A1P3).

0179

What's next for fungigation? (Fungicide application through irrigation for peanuts).

Watson, S. Raleigh, Harvest Publishing Co. The Peanut farmer. Apr 1981. v. 17 (4). p. 16, 21. (NAL Call No.: SB351.A1P3).

0180

Application of systemic fungicides via the trickle irrigation system and its implications for powdery mildew (*Leyceillula taurica*) control in pepper. HEBREW.

Barak, E. Eshet, Y. Tel-Aviv, Agricultural Workers' Organization of Israel. Hassadeh. Jan 1979. v. 59 (4). p. 818-821. ill. 7 ref. (NAL Call No.: 26 H27).

0181

Problems with the distribution of fungicides through a nutrient film system (Control of phytophthora in irrigated potted ornamental plants). DUTCH.

Jamart, G. Kamoen, O.; Lannoy, P. Gent, Belgium : Het Faculteit. Mededelingen van de Faculteit Landbouwwetenschappen Rijksuniversiteit. 1982. International Symposium on Crop Protection. v. 47 (1). p. 371-380. ill. Includes references. (NAL Call No.: 105.1 G344).

0182

Testing of chemicals for disinfection of irrigation water against fruit rot on pepper, *Phytophthora capsici*. BULGARIAN.

Karov, S. Neshev, G.; Krustev, K.; Sengalevich, G. Plovdiv, "Khristo G. Danov". Nauchni trudove - Vissh selskostopanski institut "Vasil Kolarov". 1979. v. 24 (3). p. 99-102. (NAL Call No.: 106.3 P72).

PLANT DISEASES - BACTERIAL

0183

Aerial application vs. fungigation for control of tomato disease, 1981 (Tomato (*Lycopersicon esculentum* 'C-37'), early blight; *Alternaria solani*, septoria leaf spot; *Septoria lycopersici*, bacterial leaf spot; *Xanthomonas vesicatoria*, anthracnose; *Colletotrichum phomoides*).

Potter, H.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 87. (NAL Call No.: 464.9 AM31R).

0184

Aerial application vs fungigation for control of tomato diseases, 1980 (Tomato (*Lycopersicon esculentum* 'C-37'), early blight; *Alternaria solani*, *Septoria* blight; *Septoria lycopersici*, bacterial leaf spot; *Xanthomonas vesicatoria*, bacterial canker; *Corynebacterium michiganense*, anthracnose; *Colletotrichum phomoides*, buckeye rot; *Phytophthora parasitica*).

Potter, H.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 80. (NAL Call No.: 464.9 AM31R).

0185

Fungigation for control of early blight, *Septoria* leaf spot, bacterial leaf spot and anthracnose of tomato, 1983.

FNETD. Potter, H.S. Crawford, R.A. s.l. : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1985. v. 40. p. 88. (NAL Call No.: DNAL 464.9 AM31R).

0186

Metalaxyl and fenamiphos applied through irrigation water to control black shank/root-knot complex on tobacco.

PLDRA. Csinos, A.S. Johnson, A.W.; Golden, A.M. St. Paul, Minn. : American Phytopathological Society. Plant disease. Mar 1986. v. 70 (3). p. 210-213. Includes 24 references. (NAL Call No.: DNAL 1.9 P69P).

PLANT DISEASES - VIRAL

0187

Management of insect pests of broccoli, cowpeas, spinach, tomatoes, and peanuts with chemigation by insecticides in oils, and reduction of watermelon virus 2 by chemigated oil.

Chalfant, R.B. Young, J.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Oct 1984. v. 77 (5). p. 1323-1326. Includes 6 references. (NAL Call No.: 421 J822).

0188

Clorosi ferrica: controllo mediante la
ferro-fertirrigazione per aspersione
soprachioma; Iron chlorosis: control by means
of iron fertirrigation with overhead sprinkling.
ITA.

Tropea, M; Fisichella, G; Longo, A. Ital Agric.
Oct 1977. Vol. 114 (10): pp. 119-127. Ref. (NAL
Call No.: 16 IT1).

MISCELLANEOUS PLANT DISORDERS

0189

Different irrigation regimes influence phytotoxicity of prometryn to pigeon peas (*Cajanus cajan* (L.) Millsp.) in four soils.
JAUPA. Liu, L.C. Mayaguez : University of Puerto Rico, Agricultural Experiment Station. The Journal of agriculture of the University of Puerto Rico. Oct 1984. v. 68 (4). p. 315-321. (NAL Call No.: DNAL 8 P832J).

0190

Herbicide applications in citrus through drip irrigation systems.
Del Amor, F. Leon, A.; Torrecillas, A.; Ortuno, A. Shimizu, Japan : International Society of Citriculture, 1982-1983. Proceedings of the International Society of Citriculture / International Citrus Congress, November 9-12, 1981, Tokyo, Japan ; K. Matsumoto, editor . p. 493-496. Includes 6 references. (NAL Call No.: DNAL SB369.I5 1981).

0191

Response of Concord grapes (*Vitis labrusca*) to 2,4-D (2,4-dichlorophenoxyacetic acid) in irrigation water (Herbicide residues, toxicity yield, injuries, Washington).
Comes, R.D. Marquis, L.Y.; Kelley, A.D. Champaign, Ill. : Weed Science Society of America. Weed science. July 1984. v. 32 (4). p. 455-459. ill. Includes 18 references. (NAL Call No.: 79.8 W41).

0192

Tolerance of two grass species (*Agrostis palustris*) to copper-treated irrigation water (*Poa annua*, Phytotoxicity).
Riemer, D.N. Motto, H.L. Fort Myers, Fla., Aquatic Plant Management Society. Journal of aquatic plant management. July 1980. v. 18. p. 3-6. ill. (NAL Call No.: SB614.H9).

0193

Phytotoxicity tests of some herbicides in preliminary trials of "herbigation" (Citrus trees, Sprinkler irrigation).
Giudice, V.L. Acireale, Istituto sperimentale per l'agrumicoltura. Annali dell'Istituto sperimentale per l'agrumicoltura. 1976/1977 (pub. 1979). v. 9/10. p. 129-135. 2 plates. 1 ref. (NAL Call No.: SB369.5.I8I8).

PROTECTION OF PLANT PRODUCTS – GENERAL AND MISC.

0194

Application of Benlate fungicide through a center-pivot sprinkler for white mold control in dry beans, 1980 (Beans (dry) (*Phaseolus vulgaris* 'Viva' Pink), white mold; *Sclerotinia sclerotiorum*).

Forster, R.L. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1981. v. 36. p. 51. (NAL Call No.: 464.9 AM31R).

0195

Application efficiency of herbicides by irrigation systems.

SWSPB. Banks, P.A. Dowler, C.C. Champaign : The Society. Proceedings - Southern Weed Science Society. Jan 17-19, 1984. (37th). p. 395. (NAL Call No.: DNAL 79.9 S08).

0196

Application of herbicides in the forest nursery using artificial irrigation. RUS.

Bakhtin, O V; Velichko, IA M. In Khimicheskii Ukhod za Lesom. 1973. Vol. p. 37-39.: (NAL Call No.: SB613.R9K48).

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0445

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0446

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0447

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Andreev, N.G. Galaktionova, L.G. Moskva, "Kolos". Zhivotnovodstvo. Aug 1979. Aug 1979. (8). p. 35-36. (NAL Call No.: 49 Z6).

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Irrigation of plants with nutrient water (Scandinavia). Swedish.

Aura, E.NOJQA. Oslo : Nordiske jordbruksforskernes forening. Nordisk jordbruksforskning. 1983. v. 65 (3). p. 436-437. (NAL Call No.: 11 N752).

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0451

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SNBSA. Shuliakov, L.V. Gorki : Akademiia. Sbornik nauchnykh trudov - Belorusskaia sel'skokhoziaistvennaia akademiia. 1983. (103). p. 32-36. Includes 4 references. (NAL Call No.: DNAL 106 B415).

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0453

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0454

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0456

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0459

Production of forest seeds: cultural treatments, mineral fertilizer application, liming, micronutrients and irrigation.

Garrido, M.A. de O. Sao Paulo, O Instituto. Publicacao.Instituto Florestal. 1977. 1977. (15). p. 1-20. ill. 22 ref. (NAL Call No.: SD1.I592).

0460

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VSNLA. Andreev, N.G. Merzlaia, G.E. Moskva : "Kolos". Vestnik sel'skokhoziaistvennoi nauki. Mar 1984. (3). p. 90-94. Includes 11 references. (NAL Call No.: DNAL 20 V633).

0461

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Dodolina, V.T. Bachkova, L.N. Moskva, "Kolos". Kormoproizvodstvo. 1980. 1980. (7). p. 30-31. (NAL Call No.: SB193.A1L8).

0462

Some experience from trials with the irrigation of vegetables with nutrient water (Sweden). Swedish.

Wredin, A.NOJDA. Oslo : Nordiske jordbruksforskeres forening. Nordisk jordbruksforskning. 1983. v. 65 (4). p. 556-557. (NAL Call No.: 11 N752).

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Sprinkler irrigation of liquid manure (Equipment). GERMAN.

Schlosser, R. Hamburg, Paul Parey. Wasser und Boden. Jan 1979. v. 31 (1). p. 22-24. ill. (NAL Call No.: 56.8 W28).

0464

Sprinkler irrigation or barrel sprayers on wheels for liquid manure.

Grzych, B. Warsaw, SIGMA. Wiadomosci melioracyjne i laskarskie. Nov 1978. v. 21 (11). p. 279-280. ill. 5 ref. (NAL Call No.: 54.8 W63).

0465

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0471

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Feher, A. Budapest, Magyar Agrartudományi Egyesület. Gazdalkodás. 1978. v. 22 (8). p. 48-54. ill. (NAL Call No.: 281.8 G25).

0466

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0468

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Merzlaia, G.E. Frolov, A.E.; Borisenkova, V.A. Moskva, Akademiia. Doklady TSKhA - Timiriazevskaia sel'skokhoziaistvennaia akademiia. 1979. (254). p. 57-60. (NAL Call No.: 20 M857).

0469

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Magro, J.A. Rio de Janeiro, Instituto do Acucar e do Alcool. Brasil acucareiro. Oct 1978. v. 92 (4). p. 40-48. ill. (NAL Call No.: 65.8 B73).

0470

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Kaminskii, V.S. Sanin, M.V. Timoshina, I.A. Moskva, "Nauka". Vodnye resursy. 1979. (2). p. 156-165. ill. 13 ref. (NAL Call No.: GB746.V55).

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0473

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0474

Efficiency of fertilizers as nitrogen sources to banana plantations under drip irrigation.
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0475

Fungigate and cut spray costs (Application of fungicides while irrigating, USA).
Potter, H.S. Willoughby, Ohio : Meister Publishing Company. American vegetable grower. Apr 1983. v. 31 (4). p. 8-10, 30-31, 33-34. ill. (NAL Call No.: 80 C733).

0476

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Legaz, F. De Barreda, D.G.; Zaragoza, S.; Millo, E.P. Shimizu, Japan : International Society of Citriculture, 1982-1983. Proceedings of the International Society of Citriculture / International Citrus Congress, November 9-12, 1981, Tokyo, Japan ; K. Matsumoto, editor. p. 595-598. Includes 32 references. (NAL Call No.: DNAL SB369.I5 1981).

0477

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Lekchiri, A. Bern, Switzerland : The Institute, 1983. Nutrient balances and the need for fertilizers in semi-arid and arid regions : proceedings of the 17th Colloquium of the International Potash Institute held in Rabat and Marrakech, Morocco. p. 305-314. (NAL Call No.: DNAL S631.C63 1983).

0478

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Klein, Y. Tel Aviv, Israel : Amir Cohen Advertising Ltd. Water & Irrigation Review. July 1983. p. 8-11. (NAL Call No.: DNAL S612.W3).

0479

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Martin-Aranda, J. Nunez, D.; Moreno, F.; Arrue, J.L.; Roca, M. Osijek (Yugoslavia) : (The Organization?), 1982. Proceedings of the 9th Conference of the International Soil Tillage Research Organization, ISTR0. p. 357-362. Includes references. (NAL Call No.: S604.I52

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0480

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Kovalchuk, S. Willoughby, Ohio : Meister Publishing Company. American vegetable grower. Feb 1983. v. 31 (2). p. 44, 46-47. (NAL Call No.: 80 C733).

0481

Response of tomatoes to N (nitrogen) and water applied via a trickle irrigation system. I. Nitrogen.
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0482

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Root zone modification: fundamentals and alternatives (To till, fertilize, lime, irrigate, drain, and apply pesticides).
Taylor, H.M. Arkin, G.F. St. Joseph, Mich., American Society of Agricultural Engineers. Modifying the root environment to reduce crop stress. 1981. 1981. p. 3-17. ill. Includes 36 ref. (NAL Call No.: S596.7.M63).

0484

Row crop fertigation (Fertilizer rates, tomatoes, peppers, cucumbers, through irrigation systems, California trials).
Hall, B.J. Willoughby, Ohio : Meister Publishing Company. American vegetable grower and greenhouse grower. Apr 1982. v. 30 (4). p. 71, 73. (NAL Call No.: 80 C733).

0485

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0486

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Coffey, D.L. Willoughby, Ohio : Meister
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grown in various cultural systems.**
Popenoe, J. Swartz, H.J. s.l. : North
American Strawberry Growers Association.
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0488

**Behaviors of nutrient-water and soil management
in sandy soil. VI. Movements of moisture in the
soil treated with polyethylenfilm-mulch and
vinyl-tunnel, and their effects on the growth
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Japanese.**
Kawaguchi, K. Yokomori, T.; Tsunogai, M.
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0489

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0490

**Herbicides mixtures application time and its
effects on irrigated rice performance (Brazil).
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Amaral, A.S. Santos, E.C. Brasilia, Brazil :
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Pesquisa agropecuaria brasileira. 1983. v. 18
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SOIL EROSION AND RECLAMATION

0491

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0492

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Lane, C.L. Shade, H.I. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). Paper presented at the 1985 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road,. Summer 1985. (fiche no. 85-2092). 7 p. (NAL Call No.: DNAL FICHE 290.9 AM32P).

0493

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AMBOC. Chhabra, R. Baddesha, H.S.; Rao, D.L.N. Stockholm : Swedish Academy of Sciences. Ambio. 1985. v. 14 (6). p. 360-361. ill. (NAL Call No.: DNAL QH540.A52).

FOREST MANAGEMENT

0494

Production of forest seeds: cultural treatments, mineral fertilizer application, liming, micronutrients and irrigation.

Garrido, M.A. de O. Sao Paulo, O Instituto. Publicacao. Instituto Florestal. 1977. 1977. (15). p. 1-20. ill. 22 ref. (NAL Call No.: SD1.I592).

PEST OF ANIMALS - INSECTS

0495

**Distribution of a flowable concentrate
formulation of *Bacillus thuringiensis* serotype
H-14 during irrigation of rice fields as a
function of the quantity of formulation.**

MOSQAU. McLaughlin, R.E. Vidrine, M.F. Fresno,
Calif.: American Mosquito Control Association.
Mosquito news. Sept 1984. v. 44 (3). p.
330-335. ill. Includes 9 references. (NAL Call
No.: DNAL 421 M85).

AQUACULTURE RELATED

0496

Toxicity of dalapon treated irrigation water on
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algae).

Singh, S.P. Bhan, V.M.; Balyan, R.S. Bombay :
Scientia Publishing Company. Pestology. July
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(NAL Call No.: SB950.P47).

0497

Applying nutrients and other chemicals to trickle-irrigated crops (Plant requirements, irrigation systems).

Rolston, D.E. Rauschkolb, R.S. Berkeley, Calif., The Service. Bulletin. California. University, Berkeley. Cooperative Extension Service. Aug 1979. Aug 1979. (1893). 14 p. ill. 17 ref. (NAL Call No.: S39.A2C3).

0498

Automated irrigation and nutrient injection system for closed environmental growth chambers (Winter wheat).

McKinion, J.M. Hodges, H.F.; Acock, B. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-4527). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

FARM EQUIPMENT

0499

Apply nitrogen through sprinklers: here's a cheap, simple method (Fertilizer application, equipment).
Rennie, G. Wellington, N.Z., G. Deslandes Ltd.
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Wasik, F. Mech Roln. Mar 1/15, 1974. Vol. 23 (5): pp. 15-18. (NAL Call No.: 58.8 M465).

0501

Fertigation (applying liquid fertilizers through an irrigation system).
Sincerbeau, S.A. Far Hills, N.J., United States Golf Association. USGA Green Section record. May/June 1979. v. 17 (3). p. 10-12. ill. (NAL Call No.: 60.18 UN33).

0502

Fungicide application through sprinkler irrigation systems.
McMaster, G M; Douglas, D R. Trans ASAE (Am Soc Agric Eng). Nov/Dec 1976. Vol. 19 (6): pp. 1041-1044. (NAL Call No.: 290.9 AM32T).

0503

Keeping the drops dripping Preventing plugging from chemical and biological buildup in irrigation equipment .
Dean, J P. U.S., Agricultural Research Service. Agric Res. Aug 1977. Vol. 26 (2): pp. 8-10. (NAL Call No.: 1.98 AG84).

0504

Machinery technology (Tillage, wheel traffic, land leveling by lasers, irrigation, planting, chemical applicators, harvesters).
Twist, B.R. Ames, Iowa : Iowa State University Press, 1984. Future agricultural technology and resource conservation : proceedings, RCA Symposium, Future Agricultural Technology and Resource Conservation, held Dec. 5-9, 1982, Washington, D.C. / edited by B.C. English ... (et al.). p. 450-464. Includes references. (NAL Call No.: S441.R2 1982A).

0505

Pesticides and overtree irrigation sprinklers.
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0506

Regnomat-Universal fur Klarwasser und Gulle; Regnomat-Universal for clear water and liquid manure Irrigation equipment . GER.
Schinke, H; Voigt, D. Agrartechnik. Dec 1977. Vol. 27 (12): pp. 537-538. (NAL Call No.: 58.8 D482).

0507

A simple herbigation system Irrigation equipment .
Citrus Veg Mag. Nov 1977. Vol. 41 (3): pp. 22, 41. (NAL Call No.: 80 C498).

0508

Effect of the distance between irrigating lines and the distance of plants from the lines of 3 different equipments of microirrigation on tomatoes, peppers, gladiolus and maize. ITALIAN.
Cavazza, L. Cacchi, D. Firenze, Istituto agronomico per l'oltremare. Rivista di agricoltura subtropicale e tropicale. Jan/June 1978. v. 72 (1/2). p. 13-62. ill. (NAL Call No.: 26 AG82).

0509

Experiments on multi-utilization of overhead sprinkler system (for irrigation, fertilizing, pesticide spraying) in Japanese pear orchards.
Akiyama, T. Okayama, I. Kanagawa. BulletinJapan. Engei Shikenjo. Kanagawa. Oct 1977. Oct 1977. (24). p. 105-113. ill. 7 ref. (NAL Call No.: 87 K13).

0510

Limiting characteristics concerning spray irrigation of liquid manure from pigs by means of circular-type irrigation plant "Fregat". German.
Muller, J. Berlin, East Germany, VEB Verlag Technik. Agrartechnik. 1982. v. 32 (1). p. 16-19. ill. 3 ref. (NAL Call No.: 58.8 D482).

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0511

**Sprinkler irrigation of liquid manure
(Equipment). GERMAN.**

Schlosser, R. Hamburg, Paul Parey. Wasser und Boden. Jan 1979. v. 31 (1). p. 22-24. ill. (NAL Call No.: 56.8 W28).

0512

**Use of sprinkler equipment for liquid manure
application (USSR).**

Kuz'menko, I.I. Farnosov, V.G.; Sandigurskii, D.M.; Butsykin, A.M. Moskva, "Kolos". Gidrotekhnika i melioratsiia. Aug 1980. Aug 1980. (8). p. 35-39. ill. 3 ref. (NAL Call No.: 290.8 G362).

CONSERVATION AND USE OF ENERGY

0513

Minimizing energy needs through trickle
irrigation (Cotton).

Urton, J.M. Memphis, National Cotton Council.
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Research Conference. 1981. 1981. p. 18-19. (NAL
Call No.: SB249.N6).

BIOMASS ENERGY SOURCES

0514

FESCUE AND COASTAL BERMUDAGRASS NUTRIENT RECOVERY FROM SWINE ANAEROBIC LAGOON EFFLUENTS.
WESTERMAN, P W. Energy in agriculture collection, Michigan State University, Department of Agricultural Engineering. 1979, 7th ed. SOURCE, AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS PAPER 78-4561, 1978. (NAL CALL NUMBER: 290.9 AM32P). 1979, 7th ed. (1983). (NAL Call No.: S494.5.E5E62).

0515

Controlled distribution: residual waters and purification station muds. French.
Andre, D. Lille, France : s.n. . Cultivar. Apr 1985. (182). p. 67-69. ill. (NAL Call No.: DNAL SB183.C8).

WATER RESOURCES AND MANAGEMENT

0516

Adatok a borsosmenta (*Mentha piperita* L.) ontozesehez es tapanyagellatasahoz; Data on the irrigation and nutrient supply of peppermint (*Mentha piperita* L.). HUN.

Kerekes, J; Hornok, . Herba Hung. 1972 (pub. 1973). Vol. 11 (3): pp. 39-44. Ref. Eng. sum. (NAL Call No.: 71.8 H413).

0517

Ag's \$ billion opportunity: irrigating with wastewater. 2. Fertigation .

Marsh, J H. Irrig Age Hereford. Mar 1975. Vol. 9 (6): pp. 8-9, 11-12. (NAL Call No.: TC801.I7).

0518

Ausreichende, fortlaufende gleichmassige Wasserversorgung durch Tropfenbewasserung; Adequate, continuous, uniform provision of water through sprinkler irrigation for horticultural crops . GER.

Krugerke, W. Obstbau (Vechta). Oct 1976. Vol. 1 (10): pp. 250-252. (NAL Call No.: SB354.03).

0519

The cost of water in Western agriculture.

Wilson, D.L. Ayer, H.W. Washington, D.C. : The Service. Extract: A large portion of the irrigated West has what may be considered inexpensive water--\$20 per acre-foot or less. Therefore, efforts to obtain water conservation through reduced per acre applications are not likely to be economical in many of these areas. With low-cost water, less efficient flood and siphon irrigation systems predominate. In areas with higher water costs, more efficient gated pipe and sprinkler systems are the most common. Nearly 80 percent of the water provided by the Bureau of Reclamation costs \$15 per acre foot or less. A restructuring of these contractual water prices would encourage farm operations to invest in more water conserving practices and shift from irrigated forage to irrigated food crops and feed grains. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Aug 1982. Predominantly tables. Available from NTIS, order no. PB83-152686. Aug 1982. (AGES820706). 16 p. Includes 20 references. (NAL Call No.: 916762(AGE)).

0520

Drip irrigation of cotton with treated municipal effluents. II. Nutrient availability in soil.

Feigin, A. Vaisman, I.; Bielorai, H. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. Apr/June 1984. v. 13 (2). p. 234-238. Includes references. (NAL Call No.: QH540.J6).

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(DRAINAGE AND IRRIGATION)

0679

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AUTHOR INDEX

- Abdou, F.M. 338, 741
 Acock, B. 559, 498
 Acosta N, S. 211, 231
 Adams, P.B. 241, 177
 Adriano, D C. 587
 Afanas'ev, V.P. 298, 535
 Affleck, M.E. 349, 522
 Agarwal, M.C. 53, 660
 AGENA. 262, 327, 574
 AGJOAT. 49, 88, 485
 AGKYA. 111, 457, 713
 AGMAA. 44, 728, 467
 AGNSA. 563
 AHORA. 90, 25, 352, 77, 589, 87, 639, 21, 579, 561, 323
 Aitken, J.B. 599, 350, 83, 613, 276
 AJAEA. 50, 651, 397
 Akerman, J. 113, 570
 Akiyama, T. 41, 509
 Alba, I. 726
 Albasel, N. 360
 Albasel, N. 269, 523
 Allen, R.R. 10, 491
 Alley, H.P. 51, 473, 102
 Altendorf, G. 538
 Amaral, A.S. 58, 687, 108, 60, 490, 294
 AMBOC. 398, 754, 493
 Amor, F. del. 248
 ANAZB. 53, 660
 Anderson, L W J. 296
 Andrade, V.A. de. 252
 Andrasi, I. 698, 441
 Andre, D. 420, 515
 Andreev, N.G. 68, 460, 717, 447
 Angelo, L. 15
 Apt, W. 278, 146
 Arkin, G.F. 390, 118, 483
 Arle, H F. 235
 Arnold, K. 614
 Arnold, W. E. 204, 256
 Arrue, J.L. 32, 479
 Atsekhovs'kyi, H.N. 666, 412
 Atsekhovskii, G.N. 37, 410, 662
 Aull, G.H. III. 620, 747
 Aura, E. 448, 705
 Awad, A.S. 563
 Ayer, H.W. 2, 519
 BAAFB. 690, 432
 Babb, T. 658, 242
 Bachkova, L.N. 65, 720, 461
 Backman, P.A. 151, 552
 Bacon, P.E. 632, 631
 Baddesha, H.S. 493, 754, 398
 Badger, D.D. 13, 342
 Badin, I. 251, 295
 Bakhtin, O V. 196
 Bakker, M.J. 19, 97, 329
 Balyan, R.S. 291, 496, 753
 Banita, P. 432, 690
 Banks, P.A. 195
 Bar-Yosef, B. 601
 Bar-Yosef, B. 388, 482, 387, 481, 381
 Barak, E. 180
 Barksdale, W.E. 33, 232
 Barnard, C J. 198
 Bartley, T R. 253
 Baskaran, P. 127
 Basselman, J.A. 574, 262, 327
 BCPFA. 86, 736
 Bebee, Charles N. 569
 Ben-Gal, A. 150
 Bendixen, W.E. 604, 221, 607, 227
 Ber'kin, O.I. 666, 412
 Bertolacci, M. 709
 Beshanov, A.V. 246, 665
 Beth, F. 351, 600
 Bhan, V.M. 496, 753, 291
 Bhella, H.S. 84, 630
 Bielorai, H. 335, 584, 520, 85, 379
 Bitney, Larry L. 9
 Bocko, J. 105
 Bohme, M. 21, 579, 95, 719
 Boiko, V.I. 311, 679, 424, 67, 472, 732
 Boiko, Z.I. 424, 679, 311, 67, 472, 732
 Boldyrev, A.I. 37, 662, 410, 661, 409
 Boldyriev, A.I. 666, 412, 8, 534, 422
 Bor'kin, A.I. 37, 410, 662, 409, 661
 Borin, M. 39, 674, 421
 Borisenkova, V.A. 729, 468
 Borreli, A. 43, 466
 Bowden, R.C. 642
 Bowmer, K.H. 526, 230
 Bralts, V.F. 98, 332, 578
 Bredell, G S. 198
 Bresler, E. 760, 624
 Bruce, R.R. 305, 644, 23, 144
 Bruns, V F. 236, 285, 281, 286, 235
 Bruns, V. F. 751, 287, 528, 284
 Bucher, R. 621
 Bucks, D.A. 653, 275, 610, 362
 Bufo, S.A. 739, 575, 263
 Buniak, W. 417, 103, 671
 Bureau, R G. 322
 Burt, E O. 347, 392
 Burt, E.O. 34, 380
 Buryi, V.S. 665, 246
 Butler, P. 614
 Butsykin, A.M. 416, 670, 762, 512, 730
 BVZRA. 59, 688, 120
 Cabbiness, S.G. 13, 342
 Cacchi, D. 40, 536, 508
 CAGRA. 658, 242
 Caliendo, A. 696, 439
 Callihan, R H. 319
 Callihan, R J. 218
 Camp, C.R. 83, 613, 276
 Carello, M. 279
 Carlile, Bobby Lewis. 286
 Carlton, A B. 322
 Carpenter, H.E. 177
 Cavazza, L. 40, 508, 536
 Chalfant, R.B. 134, 187, 123
 Chan, J.S. 14, 376, 627
 Chase, R.G. 383, 638
 Chatterjee, R. 625
 Chedester, L.D. 128, 594
 Cherepkov, N I. 315
 Chesnee, J.L. 23, 144

- Chesness, J.L. 565, 305, 644, 115, 634
 Chhabra, R. 493, 754, 398
 Chin, P.T. 70, 371, 617
 Christensen, I. 87, 639
 Christensen, L.A. 16, 366
 Chuprikova, O A. 315
 Ciuciuc, M. 690, 432
 Clapp, C.E. 89, 401, 755
 Clayton, K.C. 4, 1
 Cochran, D.L. 654, 292, 399
 Coffey, D.L. 119, 486
 Collins, G.M. 81, 603
 Comes, R D. 236
 Comes, R.D. 283, 191, 282, 101
 COMPA. 614
 Compton, W. 52, 407
 Constantinescu, C. 432, 690
 Constantinescu, I. 432, 690
 Coston, D C. 356
 Couvillon, G.A. 634
 Crawford, M.A. 552, 151
 Crawford, R.A. 167, 166, 169, 185, 168
 Csinos, A.S. 173, 186
 Danaricu, V. 432, 690
 Daniell, J.W. 26, 129
 Danilov, N. 446, 704
 Dasberg, S. 85, 379
 Davey, B.G. 632, 631
 Davidson, J.M. 34, 380
 De Barreda, D.G. 28, 476, 363
 Dean, J P. 503
 Del Amor, F. 215, 190
 Demin, V.A. 450, 708
 Demint, R J. 281
 Denmead, O.T. 50, 397, 651
 DeTar, W.R. 652
 Dobre, M. 432, 690
 Dodolina, V.T. 65, 720, 461
 Dorneanu, A. 690, 432
 Dorneanu, E. 690, 432
 Douglas, D R. 502
 Dow, A.I. 74, 99
 Dowdy, R.H. 89, 401, 755
 Dowler, C.C. 570, 113, 195, 234, 201, 267, 206, 303, 592, 268
 Dumitrescu, F. 690, 432
 Duncomb, D.R. 89, 401, 755
 Dutcher, J.D. 26, 129
 Dzholdoshev, K.D. 694, 436
 Dziezyc, J. 671, 417, 103
 Dziezycowa, D. 417, 103, 671
 Easton, G.D. 172
 Eck, H.V. 547, 301
 Edwards, J.H. 644, 305, 23, 144, 27, 612, 22, 121, 521
 EJSSA. 47, 337, 586
 el-Etreby, A A. 133
 El-Gamal, I. 742, 339
 El-Hady, O.A. 47, 337, 586
 El-Kobbia, T. 339, 742
 el-Monsef, S A. 133
 El-Nennah, M. 742, 339, 741, 338
 el-Wahed, S A A. 133
 Elik, E.E. 763, 725
 Ellis, B G. 587
 Engelhard, A.W. 608
 Epperson, J.E. 12, 126
 Erickson, A E. 587
 Erner, J. 85, 379
 Eshet, Y. 180
 Evans, R.O. 394, 752, 647
 EVETEX. 26, 129
 Fairchild, D. 408
 Farnosov, V.G. 730, 512
 Farrar, S.L. 11
 Farwell, B.J. 657, 299
 Fedchenko, M.I. 666, 412
 Fedchenko, N.I. 37, 410, 662
 Feher, A. 471, 546
 Feigin, A. 584, 335, 520
 Ferguson, J.A. 212
 Ferguson, R.D. 355
 Ferrarese, A. 39, 421, 674
 Fetzer, L.E. 267, 206, 303
 Fischbach, P E. 225, 643
 Fischbach, P. E. 549
 Fischer, B.B. 658, 242
 Fisichella, G. 188
 Fisichella, G. 92, 431
 Fitzsimmons, D W. 374
 Fleige, H. 701, 312
 FNETD. 167, 166, 185, 169, 168, 162, 164
 Folster, E. 90
 Fornstrom, K.J. 51, 102, 473
 Forster, R.L. 163, 164, 194
 Fouss, J.L. 406, 240, 529
 Fox, A.S. 1, 4
 Frank, J.T. 642
 Frank, P A. 281
 Frank, Z. 152
 Fraser, G. 357
 Freney, J.R. 50, 397, 651
 Frenz, F.W. 323, 561
 Frolov, A.E. 729, 468
 Funt, R.C. 143
 Galaktionova, L.G. 447
 Gallardo-Covas, F. 261, 573, 326
 Ganeles, T.A. 722
 Garabedian, S. 145
 Garcia A, J L. 211, 231
 Gardner, B.R. 86, 736
 GARRA. 206, 303, 267
 Garrido, M.A. de O. 542, 494, 459
 Gascho, G.. 88, 49, 485
 Gastoud, B. 715, 458
 Gaunce, A P. 505
 Geissler, T. 21, 579, 95, 719
 Gentsch, B.J. 209
 Gerasimchuk, M.S. 55, 415, 669
 Gerstl, Z. 340, 154
 Gerstl, Z. 523, 269, 272, 562, 255, 302, 595, 116, 582, 205
 GGrigorov, M.S. 64, 456, 712
 Gibson, W. 567
 Gilbert, R.G. 653
 GIMEA. 416, 762, 670, 444, 702, 763, 725
 Giorlando, A. 31, 30
 Girdhar, I.K. 48, 588, 76
 Gislerod, H.R. 531, 104
 Gitlin, H. 354, 602
 Giudice, V.L. 193, 250
 Glas, W. 19, 97, 329
 Glaze, N.C. 114, 592, 268
 Goldberg, S D. 213
 Golden, A.M. 173, 186
 Goldhamer, D.A. 658, 242
 Goncharov, I.F. 37, 410, 662
 Good, J.C. 633, 750
 Gorbunov, N.I. 428, 685
 Gorobets, A.S. 244
 Gorodov, M.F. 244
 Gosiewski, H. 25, 352
 Goulart, B.L. 143
 Goyal, M.R. 573, 261, 326
 Gozlinski, H. 682, 426
 Graneli, G. 697, 440

- Grant, W.R. 7, 733
 Gray, C.W. 551
 Green, J.L. 608
 Gregersen, A. 63, 453
 Grigorian, K.V. 756, 676
 Grigorov, M.S. 444, 702, 61, 703, 445
 Grisolle, J.P. 715, 458
 Gropp, Kh. 328
 Groselle, D.E. 266, 585
 Grzych, B. 464
 Hagin, J. 78, 341, 474
 Hagood, M.A. 239
 Hahn, B.R. 98, 332, 578
 Hall, B.J. 391, 484
 Hamilton, K.C. 208, 590, 743
 Hancock, J. 20, 330
 Hapase, D.G. 125
 Hare, W.W. 131
 Harrison, D.S. 633, 750
 Harrison, K.A. 293, 530
 Harrison, K.F. 26, 129
 Haskill, J.M. 333, 734
 Hatlitligil, M. 52, 407
 Hattrup, A. 281
 Hattrup, A.R. 253
 Hayden, C.W. 635
 Hee, K.S. 70, 617, 371
 Heikes, E. 223
 Heinrichs, E.A. 137
 Hejlesen, E. 63, 453
 Hermann, G.J. 374
 Hiller, L.K. 203
 Hilton, H.W. 334
 Hodges, H.F. 498, 559
 Hodgson, J.M. 236, 235
 Hofmann, H. 384
 Holjewilken, H. 404
 Holman, H. 353
 Holman, H.P. 555, 318
 Holtl, W. 313, 723
 Honcharov, I.F. 412, 666
 Hood, C.P. 45, 758, 548
 Hook, J.E. 45, 548, 758, 88, 49, 485
 Horanszky, Zs. 395
 Hornok, . 516
 Horta Sicilia, M.A. 44, 467, 728
 Horton, B.D. 305, 644, 23, 144, 27, 612, 22, 521, 121
 Howell, Terry A. 606
 Hres', V.F. 56, 675
 Huett, D.O. 24, 73, 735
 Hus, S. 678
 Hylin, J.W. 146, 278
 Hylin, V. 146, 278
 INHOA. 564
 Iordanov, V. 382
 IRGZA. 726, 718, 709
 Isakov, K.I. 436, 694
 Iskandar, I.K. 405, 761, 307
 Israeli, Y. 78, 341, 474
 Iudina, L.P. 685, 428
 Ivashkin, V.I. 711
 Iziumov, V.V. 673
 Jamart, G. 181, 716
 JAUPA. 264, 580, 189
 Jayaraman, C. 377
 JEENA. 122
 Jenkins, S.F. Jr. 157
 JEVQAA. 744, 304
 JJASDH. 270
 Johnson, A.W. 173, 186, 114, 140, 142
 Johnson, S.A. 177
 Johnston, S.A. 241
 Jolley, V.D. 75, 336
 JONEB. 141
 JOSHB. 84, 630, 305, 644
 Jury, W.A. 306, 655
 Kablov, V.V. 59, 688, 120
 Kaczorowski, T. 316
 Kadyrkulov, Ch.K. 694, 436
 Kafkafi, U. 601
 Kaliazin, I.A. 411, 663
 Kaminskii, V.S. Sanin, M.V. Timoshina, I.A. 470, 545
 Kamoen, O. 716, 181
 Kanagaratnam, J. 69, 550, 314
 Kapocsi, I. 441, 698
 Kardos, L.T. 393
 Karov, S. 727, 182
 Karzhavina, L.A. 72, 681, 106
 Kaser, W.L. 745, 369, 615
 Kashkaraev, A.I. 436, 694
 Kasinska, D. 427, 683, 107
 Katz, S. 78, 341, 474
 Kavanagh, E.E. 73, 24, 735
 Kawaguchi, K. 38, 308, 488
 Keisling, T.C. 132, 611
 Keith, L.W. 370, 746, 616
 Kelley, A.D. 236, 285, 286
 Kelley, A.D. 191, 283, 101, 282
 Kenworthy, A.L. 356
 Kerekes, J. 516
 Kesner, C.D. 98, 332, 578
 Khafizov, A.Sh. 537
 Khazanov, E.E. 731
 Khe, A.F. 72, 681, 106
 Kingdon, L.B. 583, 265
 Kirkun, J. 154
 Kiss, A.S. 395
 Kjellgren, R. 242, 658
 Klein, Y. 29, 478
 Klepal'skaia, G.S. 59, 688, 120
 Kliger, L. 582, 205
 Kochetkov, V.N. 315
 Kolomiets, A.P. 244
 Kondratenko, Anatolii Nikolaevich. 489, 418
 Konomoto, H. 628
 Konstantinova, K. 543
 Koo, R.C.J. 17, 389, 641
 Koshevoi, O.IU. 425, 680, 737
 Kovacs, G. 738
 Kovalchuk, S. 35, 480
 Kramer, D. 226
 Krasuts'ka, N.V. 8, 422, 534
 Kratky, B. 558
 Krenz, R.D. 7, 733, 15
 Krikun, J. 340
 Krikun, J. 177, 152
 Kroeker, E.J. 333, 734
 Krugerke, W. 518
 Krusberg, L.R. 143
 Krustev, K. 727, 182
 KSKZA. 55, 669, 415, 37, 410, 662, 246, 665
 Kuprii, S.I. 411, 663
 Kushkhov, Kh.M. 245, 664
 Kusiak, T.M. 722
 Kutura, J. 659
 Kuz'menko, I.I. 512, 730
 Kuznetsov, A.N. 59, 688, 120
 Lai, A.L. 69, 550, 314
 Lakomchenok, A.N. 665, 246
 Lamb, A. 734, 333
 Lambe, R.C. Smith, D. 155
 Lane, C.L. 492, 629, 748
 Lange, A.H. 227, 607
 Lange, Arthur H. 216

AUTHOR INDEX

- Lannoy, P. 716, 181
 Lapshin, L.V. 665, 246, 664, 245
 Larson, W.E. 89, 755, 401
 Lee, T A Jr. 156, 171
 Legaz, F. 28, 476, 363
 Lekchiri, A. 82, 477, 364
 Leon, A. 215, 190, 248
 Leuning, R. 50, 397, 651
 Liampert, G.P. 413, 667
 Lichev, S. 382
 Lim, K.H. 69, 550, 314
 Linden, D.R. 89, 401, 755
 Listopad, G.E. 711
 Liu, L.C. 580, 264, 189
 Longley, T.S. 551
 Longo, A. 188
 Longo, A. 92, 431
 Lotfy, A.A. 47, 586, 337
 Loudon, T.L. 259, 571, 325
 Loutfy, M S. 133
 Lozovskii, I.A. 722
 Luckhardt, R.L. 373, 619
 MAAJA. 377
 MacGregor, J. 408
 Magro, J.A. 66, 544, 469
 Mamedkhanov, B.M. 91, 300
 Mangalis, I.K. 442, 109, 699
 Manor, S. 344, 597
 Marenkin, F.S. 309, 672
 Marquis, L.Y. 191, 283
 Marsh, A W. 368
 Marsh, J H. 517
 Marten, G.C. 89, 401, 755
 Martin-Aranda, J. 32, 479
 Martin, F.G. 608
 Mayo, Z.B. 273, 609, 130
 McClendon, R.W. 45, 758, 548
 McConnell, K.E. 6, 650
 McElhoe, B. 567
 McGlasson, W.B. 73, 24, 735
 McKinion, J.M. 498, 559
 McLaughlin, R.E. 495
 McMaster, G M. 218, 502, 374
 McMechan, A D. 505
 McMullin, R.W. 297, 524
 Mehta, N.P. 136
 Mel'nik, G.G. 731
 Mel'nikova, A.I. 57, 686, 429
 Melouk, H.A. 165
 Menser, H.A. 365
 Merlo, C. 533
 Mermoud, D.E. 212
 Merrigan, I.F. 81, 603
 Merzlaia, G.E. 68, 717, 460, 729, 468, 93
 MGALA. 757
 Michels, G.J. 128, 594
 Miele, S. 438
 Miller, R J. 322
 Miller, V. 219
 Milligan, T. 396
 Millo, E.P. 28, 363, 476
 Mingelgrin, U. 340, 154
 Mingelgrin, U. 636, 280
 Mini, A. 601
 Minkler, R. 560
 Mitchell, G.A. 49, 88, 485
 Mitriukhin, A.A. 762, 416, 670
 Miyaguchi, T. 345
 Moholkar, P.R. 125
 Moreno, F. 32, 479
 Moser, B G. 560
 MOSQAU. 495
 Moss, R.B. 26, 129
 Motto, H.L. 290, 192
 Muirhead, W.A. 50, 651, 397
 Mulchandani, L.H. 136
 Muller, J. 510, 451
 Muller, K. 621
 Muller, W. 312, 701
 Mullinix, B.G. 140
 Munter, R. 408
 Musick, J.T. 301, 547
 Musser, W.N. Tew, B.V. 12, 126
 Myznikova, N.I. 59, 120, 688
 Nagle, M.E. 172
 Nakayama, F.S. 653, 275, 610, 362
 Nakladova, T.M. 93
 Narayanan, K. 124
 Nasyrov, M.N. 684
 Nazarok, M.I. 55, 669, 415
 Nazaruk, M. 682, 426
 Nedashkovskii, A.I. 244
 Nelson, S.D. 75, 336
 Neshev, G. 182, 727
 NETMA. 97, 19, 329
 Nguyen, V.Q. 24, 73, 735
 Niel, P. 458, 715
 Nikolov, G. 54, 668, 414
 Nishimoto, R. 558
 NOJOA. 705, 448, 42, 462, 721
 Nolting, S.P. 122
 Novak, L T. 587
 Novikov, V.M. 725, 763
 Novokhatskii, V.S. 711
 Nunez, D. 32, 479
 Nygren, L. 227, 607
 Ogg, A G Jr. 197
 Ogg, A. 200
 Ogg, A.G. 202
 Ogg, A.G. Jr. 553, 199, 645, 237
 Okayama, I. 41, 509
 Olson, R. 52, 407
 Ooba, M. 628
 Oosterveld, M. 524, 297
 Oren, Y. 150
 Oren, Y. 159
 Ortuno, A. 190, 215, 248
 Ostrowski, R. 454, 110, 540
 Oswalt, T.W. 274, 361
 Oswiecimski, W. 77, 589
 Ottaviano, A. 18
 Ottosson, L. 87, 639
 Ovchinnikov, A.S. 61, 703, 445
 Ovchinnikov, IU.B. 72, 681, 106
 Overcash, M.R. 647, 394, 752
 Overman, A J. 591
 Overman, A.J. 139, 147, 176, 608
 Panov, N.P. 298, 535
 Papadopoulos, I. 331, 576
 Papavizas, G.C. 152
 Parker, R. 203, 202
 Parvin, P. 558
 Paterson, J. 79, 598
 Patil, A.S. 125
 Perry, F. 560
 Perumal, R. 377
 Petrasovits, I. 3
 Phatak, S.C. 114, 592, 268
 Phene, C.J. 529, 240, 406
 Piaget, J. 527
 Pickle, F.J. 565, 115
 Pinnell, C. 155
 PLDRA. 186, 173, 172, 145
 PLSOA. 378, 749
 PLSOA2. 576, 331, 85, 379
 PNWSB. 241

AUTHOR INDEX

- Podstavek, B. 385
Podstavek, B. 532, 419
Polemio, M. 263, 575, 739
Polkovnikov, G. A. 207
Polomoshnov, B.P. 694, 436
Pomeranska, S. 700, 443
Ponder, H. G. 356
Popa, F. 210
Popa, O. 432, 690
Popenoe, J. 36, 487
Popescu, A. 210
Poston, F.L. 122
Potter, H.S. 167, 166, 185, 169, 168, 325, 259, 571, 271, 475, 183, 148, 149, 184, 158, 170, 577, 160
Pratt, P.F. 744, 304
Price, J.F. 139
Priebe, M. 689, 430
Pringle, J. C. Jr. 296, 281
Pronkin, N.K. 450, 708
Provenzano, M.R. 575, 739, 263
PVAGA. 54, 414, 668
Qualls, M. 217
Qualls, M. 141
Rademacher, W.H. 743, 208, 590
RAGDA. 343, 596
Raines, R. W. 296
Ramakrishnan, C. 124
Rao, D.L.N. 398, 754, 493
Raun, E.S. 135
Rauschkolb, R. S. 322
Rauschkolb, R.S. 96, 497, 320
Razee, D. 220
Reese, L.E. 167, 168, 571, 259, 325
Rehm, Franz. 94, 112
Reimherr, P. 621
Renger, M. 312, 701
Rennie, G. 317, 499
Reszel, R. 700, 443
Reva, L.P. 762, 416, 670
Richenderfer, J. L. 393
Riemer, D.N. 192, 290
Rivera, L.E. 573, 261, 326
RNRAA. 682, 426
Robbins, C. W. 635
Rober, R. 561, 323
Roberts, S. 99, 74
Roca, M. 32, 479
Rochester, E.W. 151, 552
Rohde, W.A. 206, 303, 267
Rolston, D. E. 322
Rolston, D.E. 96, 497, 320
Roman, J. 573, 261, 326
Ross, D.S. 581, 740, 143
Roth, L.O. 270
Roth, R.L. 86, 736
Roueche, J. 20, 330
RRESA. 72, 681, 106
Rubin, V. F. 207
Ryzhova, L.V. 685, 428
Saenkova, R.E. 694, 436
Safarov, E.Sh. 684
Sagin, V.I. 59, 688, 120
Sagiv, B. 601
Sagiv, B. 388, 482, 387, 481
Sainty, G.R. 230, 526
Sakhatov, R.S. 91, 300
Salek, J. 402, 656
Salo, T.L. 56, 675
Saltzman, S. 595, 116, 582, 205
Samson, R.G. 163
Sandigurskii, D.M. 512, 730
Sandler, D. 277, 174
Sandvol, L.E. 551
Santo, G.S. 141
Santos, E.C. 60, 294, 490
Sapunkov, A.P. 711
Sardo, V. 718
Sarpe, N. 210, 295, 251
Savina, V. M. 400
Savkina, M.B. 684
Sawyer, G.C. 361, 274
Schalscha B, E. 378, 749
Schalscha, E.B. 304, 744
Scheel, D. 637
Schinke, H. 506
Schirado, T. 744, 304
Schlesselman, J. 607, 227
Schlosser, R. 463, 511
Schmaland, G. 226
Schmidt, R. 21, 579, 95, 719
Schneider, C.L. 160, 577
Scott, D.E. Sr. 303, 206, 267
Seabrook, B. L. 367, 525
Seetharaman, R. 127
Segars, W.L. 80
Seiber, J.N. 137
Seifullina, M.P. 537
Selim, H.M. 307, 405, 761
Semakov, G.I. 731
Semenenko, S.IA. 444, 702
Sengalevich, G. 182, 727
Shachenko, V.F. 539
Shade, H.I. 629, 492, 748
Shah, A.H. 136
Shapouri, H. 15
Sharifullin, R.S. 539
Sharratt, W. J. 386
Shcherbakov, A.S. 724, 465
Shehata, A. 742, 339
Shuliakov, L.V. 710, 452
Siefert, W. 243
Simpson, J.R. 50, 397, 651
Sincerbeau, S.A. 501, 348
Singh, K. 53, 660
Singh, R. 53, 660
Singh, S.P. 291, 753, 496
Sithanatham, S. 124
Skapski, H. 25, 352
Skinner, R.E. 293, 530
Sklany, T.E. 206, 303, 267
Skoyen, I.O. 162
Slangen, J.H.G. 19, 97, 329
Smajstrla, A.G. 633, 750
Smith, D.A. 153, 556
Smith, J. H. 635
Smith, R. 46
Smittle, D. 114
SNBSA. 710, 452, 677, 423, 310
Snyder, G. H. 347, 392
Snyder, G.H. 34, 380
Sohrabi, T.M. 740, 581
Sokolov, L.N. 455
Solel, Z. 150
Solel, Z. 277, 174, 159
Sopper, W. E. 393
SOSCA. 48, 588
Spaleny, J. 100, 359, 605
SSSJD. 255, 562, 302
Stansell, J.R. 585, 266, 611, 132
Steduto, P. 343, 596
Stehlik, K. 656, 402, 706, 449
Stewart, L.E. 740, 581
Strebel, O. 701, 312
Strugeon, R.V. Jr. 165
Sturgeon, R.V. Jr. 178

AUTHOR INDEX

- Sumeghy, J.B. 24, 73, 735
 Sumner, D.R. 114
 Surnin, V.I. 691, 433
 SVISA. 673
 Swartz, H.J. 36, 487
 SWSPB. 195, 209
 Syers, K. 557, 321
 Syrovatka, T. 564
 TAAEA. 652, 565
 Tailakov, N. 91, 300
 Tajudin, M.H. 372, 618
 Talbert, R.E. 212
 Tam, T.K. 618, 372
 Tamasi, G. 757
 Tantawy, M I A S M. 133
 Taylor, H.M. 483, 118, 390
 Taylor, J.A. 81, 603
 Teasdale, J.R. 241
 Terpigorev, A.A. 416, 670, 762
 Thomson, S.J. 117, 622, 759
 Thomson, S.V. 161
 Threadgill, E.D. 622, 117, 759, 113, 570, 292, 399, 654, 572, 260, 258, 592, 268
 Tleumbetov, M.U. 457, 111, 713
 TLSAA. 109, 699, 442
 Tomoroga, P. 210, 295, 251
 Torazzo, V P. 279
 Torrecillas, A. 215, 190, 248
 TPLAA. 63, 453
 Tropea, M. 188
 Tropea, M. 92, 431
 Tsunogai, M. 38, 488, 308
 Turner, D.O. 369, 615, 745
 Turner, W E. 214
 Twist, B.R. 504
 Tymchenko, I.I. 311, 424, 679, 56, 675
 Ugriumov, A.V. 245, 664
 Underwood, R.L. 10, 491
 Underwood, T.L. 270
 Unger, P.W. 10, 491, 301, 547
 Urton, J.M. 623, 513
 Uzrad, M. 213
 Vagionas, C. 437, 695
 Vaisman, I. 520, 335, 584
 Valdes Paz, Antonio. 247
 Van Gundy, S.D. 145
 Varma, S.K. 53, 660
 Velayutham, B. 124
 Velez, V. 233
 Velichko, IA M. 196
 Vergara F, I. 749, 378
 Vergara, I. 744, 304
 Vidrine, M.F. 495
 Vincent, A P. 198
 Vogl, H. 723, 313
 Voigt, D. 506
 Vorob'ev, A.M. 673
 VSNA. 424, 679, 311, 56, 675, 412, 666
 VSNLA. 68, 717, 460
 Wample, R.L. 11
 Wasik, F. 500
 Watson, S. 179
 Weber, C. 593
 Weber, J.B. 209
 Wehunt, E.J. 644, 305, 23, 144, 27, 612
 Wenstrom, R J. 358
 West, D.W. 81, 603
 WESTERMAN, P W. 514
 Westerman, P.W. 752, 394, 647
 Whitney, E.D. 162
 Whitney, R.W. 270
 Wiese, A F. 214
 Wiese, A.F. 10, 491
 Willett, G.S. 11
 Wilson, D.L. 2, 519
 Wilson, R.G. Jr. 288
 Wlodek, R. 454, 110, 540
 Wolcott, A R. 587
 Wood, B.J. 69, 550, 314
 Worley, R.E. 26, 129
 Wrage, Leon J. 204, 256
 Wredin, A. 42, 462, 721
 WSWPA. 590, 743, 208
 WUEXA. 203, 202, 11
 Yadav, J.S.P. 48, 588, 76
 Yamaguchi, A. 346
 Yaron, B. 154
 Yaron, B. 272, 562, 302, 255, 595, 116, 582, 205
 Yaron, Bruno. 554, 254
 Yeow, K.H. 71, 375, 626, 372, 618
 Yokomori, T. 38, 308, 488
 Yoneda, S. 693, 435, 692, 434
 Young, J.R. 113, 570, 266, 585, 292, 399, 654, 134, 187, 123, 140, 611, 132, 648, 138, 142, 131
 Zajonc, I. 403
 Zakaria, Z. 71, 375, 626
 Zaragoza, S. 28, 476, 363
 Zheliazko, V.I. 677, 423, 310
 Zilberman, D. 5, 289, 649
 ZPPRA. 105, 683, 107, 427, 103, 417, 671
 ZRKZA. 64, 712, 456, 61, 445, 703

